

Preliminary Amendment
USSN 09/903,685

Attorney Docket No.: 020245.0105

Amendments to the Claims

Claims 1-44 were previously canceled. Please add new claims 46-56 as set forth below.

After adding new claims 46-56, please cancel claim 45 in its entirety without prejudice or disclaimer.

Claims 1-45 (canceled)

46. (new) A method comprising
applying a continuous stream comprising O_x gas to a material in a biological burden reduction chamber, wherein said O_x gas comprises O_1 , O_2 and O_3 ,
applying a vacuum within the biological burden reduction chamber; and
maintaining a pressure within the biological burden reduction chamber at about 0 to about 20 psia.

does not
include steps
of withdrawing
simult.

47. (new): The method of claim 46, further comprising agitating the O_x gas in the biological burden reduction chamber.

c | 48. (new): The method of claim 46, wherein the O_x gas in the biological burden reduction chamber is maintained at a concentration of about 0.1% to about 25% by volume of total gas in the biological burden reduction chamber.

49. (new): The method of claim 46, wherein the O_x gas in the biological burden reduction chamber is maintained at a concentration of about 3% to about 16% by volume of total gas in the biological burden reduction chamber.

50. (new): The method of claim 46, further comprising creating a pressure differential between the biological burden reduction chamber and an O_x gas generation cell, which pressure differential is maintained while applying the stream comprising O_x gas to the material.

51. (new): The method of claim 46, wherein a temperature within the biological burden reduction chamber is between about 32°F and about 80°F.

Preliminary Amendment
USSN 09/903,685

Attorney Docket No.: 020245.0105

52. (new): The method of claim 46, wherein a flow rate of said continuous stream of O_x gas is between about 0.1L/min/ft³ and about 2L/min/ft³.

53. (new): The method of claim 46, further comprising applying a stream of one or more gases selected from the group consisting of N_2 , CO_2 and Ar to the biological burden reduction chamber.

54. (new): The method of claim 46, wherein said O_x gas in said biological burden reduction chamber is maintained at a concentration of about 0.1% to about 100% by volume of total gas in the biological burden reduction chamber.

55. (new): The method of claim 46, wherein a pressure within the biological burden reduction chamber is maintained between about 5.5 psia and about 9 psia.

cl
56. (new): A method comprising
creating a vacuum within a biological burden reduction chamber;
applying a stream of O_x gas into a biological burden reduction chamber; and
simultaneously withdrawing O_x gas out of the biological burden reduction chamber, wherein the O_x gas comprises O_1 , O_2 and O_3 .
